

WHAT IS CLAIMED IS:

1. A method for decorating a vitreous article comprising the steps of:
  - a) applying to the vitreous article in a predetermined design a radiation curable ink composition comprising free acid groups which is (i) operable when cured to bond to the vitreous article, and (ii) strippable from the vitreous article upon exposure to alkali, followed by,
  - b) curing the ink on the vitreous article by exposing it to the radiation by which it is curable, and thereafter,
  - c) subjecting the decorated vitreous article to an elevated temperature which is higher than about 90°C until the ink is sufficiently adhered to the vitreous article.
2. The method of claim 1 wherein the alkali is an aqueous alkaline solution.
3. The method of claim 2 wherein the aqueous alkaline solution comprises 2 to 10% by weight of alkali.
4. The method of claim 3 wherein the alkaline solution is an aqueous solution of sodium hydroxide or potassium hydroxide.
5. The method of claim 4 wherein the alkaline solution contains 4% by weight of sodium hydroxide.
6. The method of claim 1 wherein the ink composition is strippable from the vitreous article upon exposure to an aqueous alkaline solution for a period of 1 to 60 minutes, wherein said aqueous alkaline solution has a temperature of 60 to 100°C, and contains 2 to 20% by weight of the total alkali composition of alkali.
7. The method of claim 1 wherein the ink composition comprises a monomer or oligomer having at least one free acidic group.
8. The method of claim 7 wherein the acidic group is a carboxylic acid group, a phosphoric acid group, or a sulfonic acid group.
9. The method of claim 7 wherein the monomer or oligomer is an ethylenically unsaturated monomer or oligomer.

10. The method of claim 9 wherein the ethylenically unsaturated monomer or oligomer is an acrylate or methacrylate.

11. The method of claim 10 wherein the acidic group is a carboxylic acid group.

5 12. The method of claim 11 wherein the monomer or oligomer contains repeating alkylene oxide units.

13. The method of claim 11 wherein the monomer or oligomer is an aromatic acid anhydride.

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14. The method of claim 1 wherein the ink composition comprises, by weight of the total composition:

about 5-95% of a ethylenically unsaturated monomer or oligomer having at least one free acid group, and,

15 about 5-95% pigment.

15. The method of claim 14 wherein the ink composition further comprises about 0.5-25% by weight of the total composition of a silane adhesion promoter.

20 16. The method of claim 14 wherein the ink composition further comprises about 0.01-10% by weight of the total composition of a polyether defoaming agent.

17. The method of claim 14 wherein the ink composition further comprises a fluorinated surfactant.

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18. The method of claim 1 wherein the ink is curable by exposure to actinic radiation.

19. The method of claim 1 wherein the ink is curable by exposure to ultraviolet radiation.

30 20. The method of claim 1 wherein the vitreous article is glass.

21. A method for stripping decorative indicia from a glass substrate decorated with a radiation cured ink composition containing free acid groups which is (i) operable after radiation curing and exposure of the decorated vitreous article to an elevated temperature which is higher than about 90°C to bond to glass and, (ii) strippable from the glass upon exposure to alkali, comprising contacting the glass substrate having the decorative inidicia

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thereon, with an aqueous alkaline solution containing about 2-20% by weight alkali for a period of 1 to 60 minutes.

22. The method of claim 21 wherein the glass substrate having the decorative indicia thereon is contacted with the aqueous alkaline solution at a temperature of about 60 to 100°C.

23. The method of claim 21 wherein the radiation cured ink composition is a polymeric composition formed by the polymerization of ethylenically unsaturated monomers or oligomers having at least one free acid group.

24. The method of claim 23 wherein the ethylenically unsaturated monomers or oligomers are acrylates or methacrylates.

25. The method of claim 23 wherein the acid group is a carboxylic acid group, a sulfonic acid group, or a phosphoric acid group.

26. The method of claim 25 wherein the acid group is a carboxylic acid group.

27. The method of claim 1 wherein the length of exposure at the elevated temperature is between about 0.5 minutes to about 30 minutes.

28. The method of claim 21 wherein the length of exposure at the elevated temperature is between about 0.5 minutes to about 30 minutes.